

# Montana Nutrient Update

ESA DISCUSSION  
FEBRUARY 17, 2015



# Montana

- ▶ MT adopted numeric nutrient criteria for TN/TP for wadeable streams and the Yellowstone River.
- ▶ Rule package submitted to EPA in August 2014.
- ▶ Includes provisions for general and individual variances.



### Examples of Draft Numeric Nutrient Criteria (July 2013)

		Numeric Nutrient Standard	
Ecoregion (level III or IV) and Number, or Individual Reach Description	Period When Criteria Apply	Total Phosphorus (µg/L)	Total Nitrogen (µg/L)
ECOREGION (level III or IV):			
Northern Rockies (15)	July 1 to September 30	25	275
Canadian Rockies (41)	July 1 to September 30	25	325
Idaho Batholith (16)	July 1 to September 30	25	275
Middle Rockies (17)	July 1 to September 30	30	300
Absaroka-Gallatin Volcanic Mountains (17i)	July 1 to September 30	105	250
Northwestern Glaciated Plains (42)	June 16 to September 30	110	1300
Sweetgrass Upland (42l), Milk River Pothole Upland (42n), Rocky Mountain Front Foothill Potholes (42q), and Foothill Grassland (42r)	July 1 to September 30	80	560
Northwestern Great Plains (43) and Wyoming Basin (18)	July 1 to September 30	150	1300
River Breaks (43c)	narrative criterion only	narrative criterion only	narrative criterion only
Non-calcareous Foothill Grassland (43s), Shields-Smith Valleys (43t), Limy Foothill Grassland (43u), Pryor-Bighorn Foothills (43v), and Unglaciated Montana High Plains (43o)*	July 1 to September 30	33	440
INDIVIDUAL REACHES (Large Rivers ):			
Yellowstone River (Bighorn River confluence to Powder River confluence)	August 1 -October 31	55	655
Yellowstone River (Powder River confluence to stateline)	August 1 -October 31	95	815

# Variance Limits

- ▶ Variances up to 20 years, subject to 3-year reviews
  - ▶ Rules require the limits below until 2016
    - ▶ General Variance:
      - ▶ > 1 MGD: 1 mg TP/L, 10 mg TN/L
      - ▶ < 1 MGD: 2 mg TP/L, 15 mg TN/L
      - ▶ Lagoons: Maintain current performance
    - ▶ Individual Variance: Permittee may apply for these if meeting the general variance is difficult, or if treating beyond gen. levels does not make sense. Requires case-by-case analysis.
- These limits expire in July 2017.

# Other Montana Work

- ▶ Nutrient Trading:

- ▶ MDEQ adopted a nutrient trading policy
- ▶ MT is currently completing analysis of supply/demand to understand the program's viability

- ▶ Lagoons:

- ▶ MDEQ has hired a contractor to evaluate options for nitrogen reductions in lagoons (for both ammonia and TN).
- ▶ Plan to test recommended approaches in 2015.
- ▶ State investing in optimization.



Facility_Name	County	Receiving_Water	Species	Design_MGD
<b>TOWN OF DARBY WWTF</b>	Ravalli	BITTERROOT RIVER	Bull Trout (LT)	0.155
<b>STEVENSVILLE WWTP</b>	Ravalli	BITTERROOT RIVER	Bull Trout (LT)	0.3
<b>LOLO WWTP</b>	Missoula	BITTERROOT RIVER	Bull Trout (LT)	0.34
<b>CITY OF HAMILTON WWTP</b>	Ravalli	BITTERROOT RIVER	Bull Trout (LT)	1.987
<b>REVETT SILVER COMPANY - ROCK CREEK MINE</b>	Sanders	CLARK FORK RIVER, ROCK CREEK	Bull Trout (LT)	0
<b>TOWN OF PHILIPSBURG WWTP</b>	Granite	FLINT CREEK	Bull Trout (LT)	0.2
<b>MONTANORE MINERALS CORP MONTANORE MINE</b>	Lincoln	LIBBY CREEK & ALLUVIAL GROUNDWATER	Bull Trout (LT)	0
<b>TOWN OF NASHUA WWTF</b>	Valley	MILK RIVER	Pallid Sturgeon (LE)	0.048
<b>CITY OF GLASGOW WWTF</b>	Valley	MILK RIVER	Pallid Sturgeon (LE)	0.7
<b>EUREKA SEWAGE TREATMENT</b>	Lincoln	TOBACCO RIVER	Bull Trout (LT)	0.35
<b>BN WHITEFISH FACILITY</b>	Flathead	WHITEFISH RIVER	Bull Trout (LT)	0
<b>CITY OF WHITEFISH WWTF</b>	Flathead	WHITEFISH RIVER	Bull Trout (LT)	1.25
<b>TOWN OF SAVAGE WWTP</b>	Richland	YELLOWSTONE RIVER	Pallid Sturgeon (LE)	0.04
<b>TOWN OF TERRY WWTF</b>	Prairie	YELLOWSTONE RIVER	Pallid Sturgeon (LE)	0.15
<b>MILES CITY WWTP</b>	Custer	YELLOWSTONE RIVER	Pallid Sturgeon (LE)	2
<b>MDU - LEWIS &amp; CLARK PLANT</b>	Richland	YELLOWSTONE RIVER	Pallid Sturgeon (LE)	42.34



#### MPDES Permit

##### Design Capacity

- ≤ 0.05 MGD
- 0.05 - 0.50 MGD
- ≥ 0.50 MGD

- Counties
- White Sturgeon Occupied\*
- Pallid Sturgeon Occupied
- Bull Trout Occupied
- Bull Trout Critical Habitat



0 30 60 120 Miles

\*Note: White Sturgeon occupied waters (Kootenai River), are also Bull Trout occupied and critical habitat waters